

Perinatal Mood & Anxiety Disorders: A Public Health Approach





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Objectives

- Understand the public health and clinical context of perinatal mood and anxiety disorders (PMAD), nationally and locally
- Comprehend the biological and socio-emotional impact of maternal depression on attachment and child development
- Learn strategies for best practice screening, referral, and treatment
- Become familiar with Vermont improvement strategies

A Public Health Crisis

50% of women in Vermont's Nurse Family

Partnership program screened positive for perinatal depression

MCH Strategic Plan

By September 2015, conduct an assessment to determine existing maternal depression resources and gaps, and develop a plan to increase capacity of treatment providers and educate primary care

Maternal Depression Work Group

December 2013	MDWG Brainstorm
	Existing resources
	Gaps/Barriers
	Opportunities/Wish list
January 2014	Review of other State strategies
February 2014	Needs Assessment (n = 191 responses!)
	Screening, Diagnosis, Referral, and Treatment
	Knowledge and comfort
	Resources
March 2014	MDWG Recommended Strategies
Summer 2014	Action Planning

Maternal Depression Work Group

- AHS
 - Integrated Family Services
 - DCF (CIS)
 - DOC
 - DMH
 - DVHA/High-Risk Pregnancy
 - VDH (CO, WIC, and OLH)
- □ Blue Cross/Blue Shield
- Cambridge Health Center
- Counseling Service Addison Co.

- FAHC/Maternal Fetal Medicine
- Howard Center
- Northwestern Medical Center/Ob Gyn
- Nurse Family Partnership
- Parent
- □ UVM/Department of Psychiatry
- VCHIP
- Vermont Postpartum Task Force

Needs Assessment Survey

	Scope of practice includes (%)	Of those whose scope of practice includes, % who currently
Talk with/educating about maternal depression	74.2	86.9
Screen for maternal depression	54.7	84.9
Diagnose maternal depression	29.1	89.1
Refer for maternal depression services/resources	83.8	91.3
Treat maternal depression	30.7	89.6

Needs Assessment Survey

Of respondents, who's scope of practice includes:	Somewhat (4) or Very (5) Knowledgeable	Somewhat (4) or Very (5) Comfortable
Screen for maternal depression	76.3	68.0
Diagnose maternal depression	78.3	73.9
Refer for maternal depression services/resources	70.3	68.5
Treat maternal depression	62.0	56.0

Do you currently screen for maternal depression using a validated tool?	Percent
All respondents	26.2
Of those who's scope of practice includes screening	46.7

Proposed Strategies

- 1. Health care: Increase capacity of Vermont's providers to educate, screen, diagnose, refer, and treat maternal depression
- 2. Mental health: A robust support and treatment referral network is available to primary care providers and social service providers.
- **3. Financing:** Understand, support, and/or enhance payment systems for maternal depression (IFS, Medicaid, private insurers).
- 4. Public education: Vermonters have access to comprehensive maternal depression educational information and support and treatment options.

Current/Planned Strategies



Ql in pediatric care



Public awareness

System of care

Consultative service



capacity in mental health



Perinatal Mood & Anxiety Disorders Consultation Service

- Provides consultation and education for healthcare, mental health, and community providers
- □ CONSULTATION/EDUCATION TOPICS
 - Preconception planning
 - Identification of risk factors
 - Screening, Assessment, and Diagnosis
 - Treatments
 - Recommended psychotherapeutic models
 - Psychotropic medications
 - Strategies for prevention, risk reduction
 - Finding local resources



UVMHealth.org/MedCenter

Beyond the Blues:

Mood and Anxiety Disorders in the Perinatal Period



What are Perinatal Mood and Anxiety Disorders

Perinatal:

- Preconception
- Pregnancy
- The first year post partum
- Spectrum of Emotional Distress
 - Depression
 - Anxiety
 - Obsessive Compulsive Disorder
 - Post Traumatic Stress Disorder
 - Bipolar disorder
 - Psychosis



Perinatal Mood and Anxiety Disorders are the number ONE complication of pregnancy

Perinatal Mood and Anxiety Disorders

- Studies vary but average 18 %
 - Up to 51% in lower socioeconomic status
- Women have a greater risk for depression and anxiety
 - Stress is linked to Depression and Anxiety
 - Women are generally exposed to higher levels of stress as they are more likely to be the victims of abuse and poverty
- Pregnancy, Birth, and the Postpartum transition are POTENT Stressors
 - Physical/Emotional/Social
- Women have the greatest risk of depression and anxiety around childbearing.
- PMADs behave somewhat differently



Physical/Biological Stressor

- Nutritional demands
 - Pregnancy
 - Lactation
- Hormones
- Physical changes
- Pregnancy discomforts and complications
- Birth
- Fatigue, sleep deprivation
- Breastfeeding
- Physical healing after birth



Hormones

- Estrogen
- Progesterone
- Oxytocin
- Prolactin
- Cortisol



Psychosocial Stressor

- Myths and Expectations
 - Pregnancy, Birth, Baby, Parenting, Relationships
- Role transition
- Renegotiate responsibilities and relationships
- Rely on support systems
- Career/job/financial
- Loss
- Achieving pregnancy, easy/hard, 50% are unplanned
- Motherhood is a challenge, frequently frustrating, and sometimes not very rewarding.
- Life with baby is not always what you expect.
- Increased domestic violence



Risks of Untreated Perinatal Mood and Anxiety Disorders

Risks to Pregnant Mother

- Inadequate prenatal care and non compliance with recommendations
- Poor self care
- Inadequate or excessive weight gain
- Sleep disruption
- Risk of substance and tobacco use
- Risk of suicidal thinking and behavior
- Suicide may account for up to 20% of postpartum deaths



Risks to Women

- Difficulty in fulfilling family roles
- Diminished responsiveness to infant cues
- Attachment difficulties with their baby/other children
- Fear of having another baby
- Financial worries due to inability to work
- Increased risk for future episodes of depression
- Chronicity
 - Mental health
 - Physical health



Risks to the Pregnancy/Fetus

- Stress and stress hormones are related to pregnancy complications, fetal, and postnatal development
 - Pregnancy
 - Miscarriage
 - Preeclampsia
 - Gestational diabetes
 - Preterm birth
 - Fetus
 - low birth weight
 - Effects on early brain development
 - Post birth
 - · developmental delays
 - metabolic diseases later in life



Risks to Neonate and Infant

- Increased risk of irritability, jitteriness, excessive crying in the first 6 months of life
- Impacts early parenting
 - Safety behaviors
 - Feeding Decreased length of breastfeeding
 - Behaviors that promote early development
- Increased risk of abuse and neglect
- Insecure attachment patterns
- Delayed or impaired intellectual or motor development
- Damaged stress response systems
- Failure to thrive



Risks to Infant/Child

- Feeding problems and poor weight gain
- Irritability and sleep problems
- Delayed or impaired development of cognitive skills, social skills, and expressive language and motor skills
- Problems with behavior, conduct, and attention (often become apparent at school age)
- Poor emotional attachment (reduced mother-infant and father-infant attachment)
- Psychiatric diagnosis



Risks to Partner/Family

- Helplessness and lack of control
- Anger and resentment due to the disruption of normal life
- Guilt over the suffering of the new mother
- Instability in marital and family relationships
- Higher risk of divorce



More Risks

- Increased cost of medical care
- Depression is a leading cause of disability



Spectrum of Emotional Distress

Post partum Blues - Not a disorder

- 50-80%
- found in all cultures
- Unrelated to past mental health or psychosocial stressors
- May last a few hours to 14 days
- Responds to supportive interventions
- Still future oriented, worries are not unmanageable, predominant mood is happiness
- Symptoms:
 - Tearfulness
 - Mood fluctuation, sadness, irritability
 - Anxiety
 - Increased emotional reactivity and intensity



Depression

- 21.8% prevalence in the first postpartum year.
- In a study of 10,000 mothers:
 - 26.5% episode with onset prior to pregnancy in a chronic pattern
 - 33.4% onset in pregnancy
 - 40.1 onset in the PP period
 - 68.5% unipolar
 - 66% comorbid anxiety (most often GAD)
 - 22.6% diagnosed with BPD with depressive presentation
 - 19.3 endorsed thoughts of self harm



Bipolar Disorders

- Bipolar I
 - 71% of women who go off medications for pregnancy will relapse before delivery
 - More rapid onset and severity
 - Most in first trimester and depressive or mixed.
- Bipolar II
 - Especially vulnerable to severe depression
 - Potential for an initial hypomanic phase
 - Full of energy
 - Need little sleep
 - Lapse into a depression several weeks later
- 50% of women with Bipolar disorder are diagnosed postpartum- 60% present with depression



Anxiety

- General Anxiety Disorder
 - 6% antepartum
 - 10% postpartum
 - Twice the incidence in general population
- Not typically targeted for screening



Postpartum Obsessive Compulsive Disorder

- 11% (population risk 2-3%)
- Scary thoughts. Intrusive repetitive thoughts and images
- Presents as thoughts of harm to the child
- Anxiety reducing behaviors.
- Ego dystonic. These thoughts are distressing to the mother and she will do what she needs to keep the baby safe.



Postpartum Scary Thoughts

- Common symptom of PPD
 - 41% of women with non-psychotic PPD will experience
 - 91% mothers and 88% fathers report them some point.
- Negative repetitive unwanted intrusive thoughts or images or impulses.
 - Can be indirect or passive or imply intention
 - Do not include delusion or hallucinations related to harming the baby
- Not an indication of Psychosis but may be part of a postpartum OCD and warrant a referral for evaluation and treatment.
- A Mother's distress over these thoughts are a good sign.
 - Egodystonic
 - Respond well to treatment
- Screen for them



Postpartum Post Traumatic Stress Disorder

- 9% screen + for meeting criteria for PTSD
- 18% experience elevated levels of PTSD symptoms
- Up to one-third of women report a labor/birth that fulfills the criteria for a traumatic event
- Was the birth perceived as traumatic?
- Nightmares, intrusive thoughts
- Attempt to avoid thought about the birth or reminders?
- Constantly on guard, watchful, or easily startled?
- Numb or detached from others, activities or surroundings
- Do not make any assumptions about the meaning or impact of a traumatic event.



Postpartum Psychosis

- RARE 1.1 to 4.0 per 1000 births.
- Early onset
- Confusion, disorientation, delusions, hallucinations, insomnia, rapid mood swings,
 - Symptoms may come and go. < 20% of women reveal symptoms
 - Close family are more likely to see the extreme behavioral symptoms
 - May act frightened or paranoid
- Thought of harming baby that are not recognized as foreign. Ego syntonic
- Symptom rather than a syndrome
 - Major depressive disorder.
 - Bipolar I
 - Schizophrenia
- Suicide/infanticide is a significant risk
- Increased risk with family history
 - Bipolar disorder
 - Schizophrenia
 - Alcoholism



Stage of Gestation

Pregnancy or Pathology?

- 1st trimester
 - Nausea
 - Fatigue
 - Ambivalence
- 2nd and 3rd trimester
 - Estrogen, progesterone effects
 - Cortisol
- Birth
 - Life transition
 - Can be perceived as traumatic
- 4th trimester
 - Profound hormonal shift
 - Sleep
 - Pain
- Lactation



Depression and Anxiety in Pregnancy

- Normal symptoms of pregnancy can mimic the neurovegetative symptoms of depression and the symptoms of anxiety.
- The changes of pregnancy may uncover biological risks.
- Symptoms may include:
 - Multiple and severe physical complaints
 - Pronounced anxiety



DSM-V criteria for Major Depressive Episode

- Depressed mood
- Anhedonia
- Significant increase or decrease in appetite/weight
- Insomnia/hypersomnia
- Psychomotor agitation/retardation
- Fatigue/loss of energy
- Feelings of worthlessness/inappropriate guilt
- Diminished ability to think, concentrate, or make decisions
- Recurrent thoughts of death or suicide



Depression and Anxiety Postpartum

- Normal symptoms may mimic symptoms of PMAD
- Profound physiologic changes/pain
- Sleep/Insomnia
- Weight loss beyond what is expected
- Inability to cope
- Hopelessness
- Confusion and disorientation
- Difficulty concentrating
- Feeling detached from the infant as if going through the motions
- Overwhelming anxiety, fear of being left alone



DSM-V criteria for Generalized Anxiety Disorder

- Restlessness or feeling keyed up or on edge
- Being easily fatigued
- Difficulty concentrating or mind going blank.
- Irritability
- Muscle tension
- Sleep disturbance (difficulty falling or staying asleep, or restless, unsatisfying sleep).



Differential Diagnosis

- Thyroid disorders
- Anemia
- Medication Side effects
 - contraceptives
 - Reglan
- Nutritional/Vitamin deficiencies
- Diabetes
- Autoimmune or other medical disorders



Symptoms = Self

- Biological symptoms of anxiety and depression are seen as self
- Insomnia, decreased appetite, agitation, indecision, confusion, irritability

Equals

I AM AN AWFUL MOTHER



Screening

- Essential for early detection and treatment
 - Only 6% pick up without screening!
 - Consider mental health as any other health indicator (BP, weight)
- Reduces the duration and severity of symptoms
- Provide brief explanation of why you are screening and that you screen all mothers.
 - Normalizes
 - Reduces stigma
- When
 - Preconception. First prenatal contact, second trimester, postpartum, intermittently in the first year.
- Who
 - EVERYONE



How are we doing?

- < 25% of women seen by OBGYN were recognized as having a psychiatric diagnosis
- < 20 % of pregnant women with psychiatric diagnosis were treated
- > 50% of pregnant women on antidepressant were still symptomatic due to suboptimal treatment



Edinburgh Postnatal Depression Scale (EPDS)

- Designed to detect PMAD in healthcare settings, this 10question screen can be completed in about 5 minutes.
- Sensitivity: 78% Specificity: 99%
- Validated for use with PPD
- Most widely studied
- Available in more than 20 languages
- Free
- No parenting-specific questions
- Self-report measures subject to woman's perceptions



Patient Health Questionnaire (PHQ-9)

- 10-item scale designed to compare depressive symptoms against DSM criteria items in a healthcare setting
- Sensitivity: 88%
 Specificity: 88%

Specificity: 88%
Predictive values unknown

- Questions reflect DSM criteria to aid diagnosis
- Validated for use with PMAD
- Free
- Not diagnostic, despite reflecting diagnostic criteria
- Not specific to PMAD
- Self-report
- http://www.phqscreeners.com/instructions/instructions.pdf



Sample Clinical Interview Questions

- What is your mood like most of the time since you had your baby?
- What areas of your life bring you enjoyment (e.g., socializing, working, and exercising)? Have you been active in these areas since the birth of your baby?
- When have you been able to feel pleasure or joy since you had your baby?
- How would you describe being a mom (this time)?
- Do you ever feel guilty or bad about how well you are caring for the baby?
- When you sleep, are you still tired upon waking? Do you feel energized?
- Do you feel as if it takes more energy than usual to move or do chores? Has anyone commented that you walk or talk more slowly than before you had the baby?
- Are you eating enough? How much? Does the food taste appetizing to you?
- Do you have difficulty concentrating or making decisions?
- Have you ever experienced symptoms of depression or anxiety? Has anyone in your family?
- Are you breastfeeding? If not, what led you to stop (or choose not to)?
- What kind of help are you getting with the baby?
- What kind of help are you getting with household chores?
- Are there people in your life who have children? Have you talked with them about their experience?



Sample Clinical Interview Questions- Anxiety

- Are you able to rest or sleep when the baby sleeps?
- Do you worry about the baby's health? Have you ever taken the baby to the emergency room?
- Are you afraid to be alone with the baby?
- Do you worry that you might hurt the baby?
- Are you having difficulty
 - leaving the house
 - Driving with the baby
 - Caring for the baby by yourself
 - Leaving the baby with someone else
- Many women have thoughts they find strange or frightening. Are you having any thoughts that are scaring you?



Psychosocial Risk Factors

- Unplanned/unwanted/mistimed pregnancy
- Interpersonal violence (current or past)
- Unemployment, the woman or her partner, not by choice
- Young maternal age, especially adolescence
- Marital dissatisfaction
- Lack of social support, especially from the partner
- Recent stressful life events within 2 years of pregnancy
- Stress regarding child care for the new baby or other children (mom's perception of her stress level is key)
- Fetal anomaly or infant illness immediately after birth
- Trauma related to the pregnancy or birth
- Difficulty breastfeeding
- History of sexual abuse or trauma
- Prior infertility, pregnancy conceived via assisted reproductive technologies, and multiples
- Prior miscarriages, neonatal deaths, stillbirths



Biological Risk Factors

- Previous episode of perinatal onset of mood or anxiety disorder
- Symptoms of anxiety or depression during pregnancy
- Personal or family history of psychiatric disorders
- History of menstrual related mood symptoms or other hormonally related mood changes
 - PMDD
 - Hormonal contraceptive
 - Infertility treatment



General Treatment Guidelines

- Prevention: all women and their families need the tools to prevent and recognize perinatal mood and anxiety symptoms.
 - Anticipate
 - Educate
 - Screen
 - Psychosocial supports
 - Psychotherapy
 - Medications
- Intervene early



"Treatment" of the Blues

- Anticipate and prepare
- Promote Sleep
- Optimize nutrition
- Promote breastfeeding
- Tincture of time



Psychotherapy

- General Guidelines
 - Psychotherapy should be considered a first-line treatment.
 - Psychotherapists should be well trained and familiar with empirically validated treatments
 - Develop a network of psychotherapists
 - Should be trauma informed
- Interpersonal Psychotherapy
- Cognitive Therapy or Cognitive-Behavioral Therapy
- Marriage or Family Therapy
- Augment with Social Support or Support Groups



Joint report of the APA and ACOG

- The Management of Depression during Pregnancy
 - September 2009 Obstetrics & Gynecology
- Algorithms
 - Preconceptual on medications
 - Pregnant not currently on medications
 - Pregnant on medications
- Woman's preference and psychiatric history
- Documentation
 - Other drug and environmental exposure since conception
 - Risk, benefit, alternatives of all treatments and untreated depression



Choosing Medication

- Consider safety throughout the perinatal period.
- Ideal to chose one medication to use from conception to lactation with the goal of minimizing exposure to the child and prevent relapse in the mother
- Integrate good psychopharmacology principles with what is known about medications in pregnancy and lactation.
- Start with lowest dose
- Monotherapy is best
- The safest medication may not be the one that works best for your individual client.
- Use up to date resources.



FDA Drug Categories

- Pregnancy and Lactation Labeling Rule (PLLR)
- FDA Pregnancy
 - A: proven safe
 - B: probably safe
 - C: some risk, benefits may outweigh risk
 - D: significant risk, in serious maternal illness benefit may outweigh risk
 - X: contraindicated
- Lactation
 - Hale
 - Briggs
 - AAP



Data Sources

Pregnancy data

- Summary of studies in humans and animals
- None are FDA approved for use in pregnancy
- FDA categories can be misleading
- All psychotropic medications cross the placenta

Breastfeeding data

- Case reports and case series
- Continues to be updated



Benefits of Medications

- Effectiveness
- Prevent Relapse or Reoccurrence
- Severe disease



Risks of Medications

- Effectiveness
 - Comparison to placebo or therapy
- It is Complicated!!!
 - Medication effects
 - Mental health diagnosis
 - Heredity
 - Social
 - Environmental
 - Nutrition
 - Substance exposure...



Perinatal Pharmacodynamics

- 1st trimester
 - Miscarriage
 - Teratogen
- 2nd and 3rd trimester
 - Short term: pregnancy complications
 - Long term: infant outcome
- Birth transition
 - Withdrawal/adaptation
- 4th trimester
 - Infant exposure during Lactation



Perinatal Pharmacokinetics

- 1st trimester
 - Nausea/vomiting/Decreased gastric emptying
- 2nd and 3rd trimester
 - Physiological changes of pregnancy
 - Decreased albumin level-protein binding
 - Increased renal clearance and liver metabolism
 - Fetal
 - Immature liver function
 - Relatively permeable blood brain barrier
 - Transport of drug back to maternal circulation
- Birth transition
 - Rapid change in drug "dose" for infant
 - Physiological changes of pregnancy reverse
- 4th trimester
 - Drug transfer into milk
 - stage of lactation
 - Infant pharmacokinetics



Risks of Selective Serotonin Reuptake Inhibitors

- Preconception and first trimester
 - Teratogenicity
 - · Data is mixed
 - Miscarriage
 - May increase but still falls within population norms
- Pregnancy
 - Shortens gestation by 1 week
 - Increases risk of Preterm birth from 6% to 22%
- Birth
 - 30% newborn transitional symptoms
 - · Benign, self limited
 - Persistent Pulmonary Hypertension of the Newborn (PPHN)
 - 6/1000 newer studies suggest 2/1000
- Long term neurodevelopment and behavior
 - No strong evidence found to link to Autism spectrum disorders
 - Antidepressant use does not predict any cognitive or behavioral outcome
 - Severity of maternal depressive symptoms does!



Other Antidepressants

- Data Limited
 - No evidence for major malformations
- Wellbutrin/Buproprion
 - Associated with increased risk of ADHD
- TCAs
 - Hypoglycemia, respiratory distress, lower Apgar's, jaundice
 - Increased use of laxatives and anti-diarrheal meds in infants



Risks of Anxiolytics

- Benzodiazepines
 - Xanax/Alprazolam
 - Ativan/Lorazepam
 - Less likely to accumulate in fetal tissues
 - Klonopin/Clonazepam
 - Longer half life
 - Cleft lip/palate risk 0.7% in older studies, newer studies suggest risk is lower (baseline risk 0.1%)
 - Newborn Withdrawal
 - Infant sedation, respiratory depression



Stimulants

- D, L-amphetamine
 - Adderall
- D, L-methyphenidate
 - Ritalin, Concerta
- Limited data
- Much information is based on abuse
- No evidence of increased risk for malformation with therapeutic doses
- Potential for Low Birth Weight, withdrawal
- No studies on long term effects



Other Psychotropic Medications in the Perinatal Period

- Often associated with severe disease
 - Mood Stabilizers
 - Antipsychotics
- Sleep medications
- New medications
- Pre pregnancy considerations.



Supplements and Botanicals

- Supplements
 - Omega 3 EFAs
 - DHA 200-400 mg QD prevention
 - EFA 1000 mg QD treatment
 - Vitamin D3
 - Folic acid
 - SAMe
- Botanical
 - St Johns Wort
 - GRAS for lactation
 - Significant drug interactions
 - Kava
 - contraindicated
 - Valerian
 - Chamomile, Lemon balm, Passionflower....
 - TCM
- Homeopathy



Considerations for Lactation

- Medication properties affect the amount of drug in milk
 - Molecular weight > 600 less likely to transfer.
 - Lipid solubility increases transfer
 - Volume of distribution
 - pH (plasma 7.4 milk 6.8)
 - · Weak acids are not attracted, weak bases are
 - Shorter half life drugs are better.
 - Higher protein binding transfer less readily into the milk
 - Plasma level
 - Milk plasma ratio < 1 is better
- "Dose" that infant receives is also dependent on
 - Infant absorption, detoxification, excretion
 - Milk volume
 - Stage of lactation
 - Drug Half life
- Relative infant dose
 - RID=infant dose/maternal dose
 - < 10% best</p>
- Informed consent to include risks of untreated depression/anxiety or not breastfeeding



Exposure always occurs, be it to treatment or illness

Medication Resources

- www.motherisk.org
- www.mothertobaby.org
- www.womensmentalhealth.org
- http://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm
- www.ibreastfeeding.com
- http://www.ppmis.org.au
- www.NHBreastfeedingTaskForce.org



Steps to Wellness

janehonikman.com

- Education
- Sleep
- Nutrition
- Exercise and time for self
- Non judgmental sharing
- Emotional support
- Practical support
- Referrals and other resources



Complementary Approaches

- Nutrition
- Exercise
- Biblio-therapy
- Naturopathy
- Acupuncture
- Light therapy
- http://www.nhbreastfeedingtaskforce.org/pdf/brea stfeeding_depression.pdf
- http://www.uppitysciencechick.com/



Parent Resources

- http://www.postpartumprogress.com
- www.postpartum.net :Postpartum Support International
- <u>www.ppdsupportpage.com</u> : online support group
- www.postpartumdads.org
- www.postpartumcouples.com
- <u>www.fussybabynetwork.org</u>: warm line telephone support nationwide.



Provider Resources

- www.step-ppd.com
- http://www.postpartum.net/perinatal-mental-healthtrainings/
- https://www.beyondblue.org.au/resources/healthprofessionals/perinatal-mental-health

What can you do?

- □ Prioritize this population
- □ Be the champion/ Find a champion
- ☐ More training
- □ Partner with home visiting

Contact Information

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